1983

Aviation

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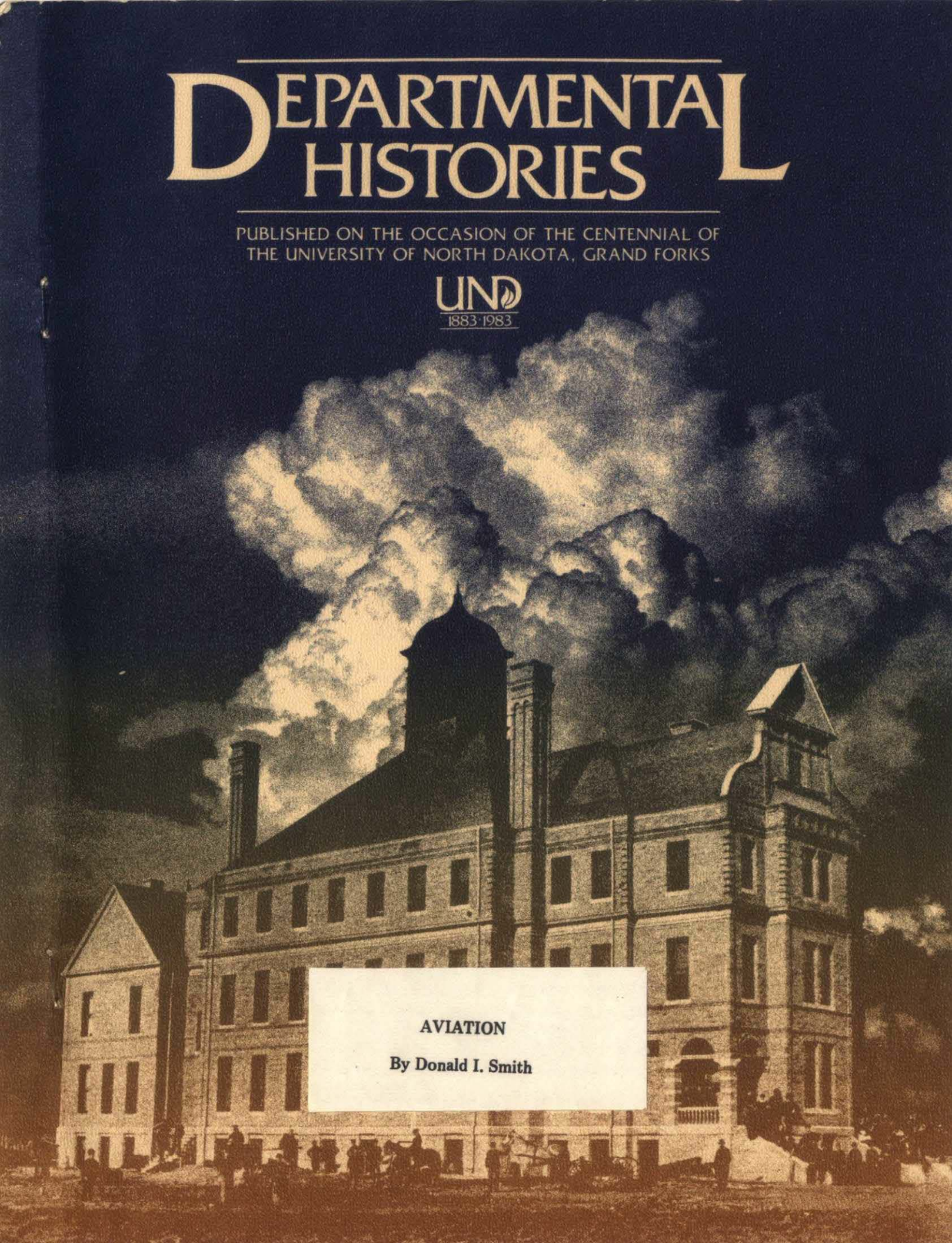
University of North Dakota

DEPARTMENTAL HISTORIES

PUBLISHED ON THE OCCASION OF THE CENTENNIAL OF
THE UNIVERSITY OF NORTH DAKOTA, GRAND FORKS

UND
1883·1983



AVIATION

By Donald I. Smith

HISTORY OF THE DEPARTMENT OF AVIATION

by Donald I. Smith
Associate Professor and Chairman

1927

Aviation had its early beginnings at the University of North Dakota during the Spring of 1927 when Dr. Elroy Bollinger and a group of his Industrial Arts students built a glider as a class project. The glider, a training model, was designed by the famous pioneering aeronautical engineer, Jack Northrup. In fact, Northrup, founder of Northrup Aviation, visited the Grand Forks campus to check the students' workmanship prior to the first epoch-making flight. The launching took place on campus at the site of the present Medical School. With Elroy Bollinger at the controls, the glider was towed into the air by means of a long line attached to the rear bumper of his 1927 Willys Knight sedan. He reached the astounding altitude of 300 ft. on the first try.

* * * * *

From these humble, but historic beginnings, the importance of Aviation was again recognized at the University of North Dakota when a young undergraduate student arrived on campus in 1964. The student was John D. Odegard, a native of Minot, North Dakota, who had an exceptional background in Aviation despite his tender age of 23. Prior to coming to UND, John had attended Minot State College, the University of Colorado and had been employed in a potpourri of flying positions, ranging from cropduster to corporate pilot, from small fixed base operator to a management position with the large Boeing Aerospace Corporation.

1967

After coming to UND to complete his Bachelor of Science degree in Management, he obtained his Masters degree in Accounting and qualified as a Certified Public Accountant. His intention was to return to the aerospace industry with a strong packet of credentials. However, in 1967, John as a rookie Accounting Instructor at UND, selected as his Masters degree thesis the topic entitled, "Feasibility and Cost Analysis of Private Aircraft Transportation for the University of North Dakota." This thesis was so practical that it was immediately accepted by the University and he soon found himself transporting the University faculty when not in the classroom.

In addition to John's classroom and air service involvement, he played an instrumental role in re-organizing and strengthening the UND Flying Club. It was at that time that he envisioned the possibility of offering an Aviation/Business curriculum, which would be unique in the nation.

A quote from the November 15, 1966, issue of the Dakota Student stated "The course might be offered experimentally next semester with 3 credits, the eventual goal being a curriculum leading to a B.S. degree in Aviation Management."

1968

By 1968, the idea began to take form and the Department of Aviation was in the making. Because of the business content of the original curriculum, it was natural that the new program be a part of the College of Business and Public Administration. Then came the task of selling the idea to the Dean of the College, the Curriculum Committee, and the members of the Board of Higher Education. During this critical period, John Odegard gained the solid support of the Dean of the College of Business and Public Administration, now President of the University, Thomas Clifford. Because of his extensive business experience, Clifford immediately recognized the importance of aviation and the need to educate aviation managers.

In addition to the acceptance of the academic program, other obstacles had to be overcome. The new program needed staff, aircraft and facilities. The first major hurdle was crossed when Dean Clifford and President Starcher convinced the UND Alumni Association to finance two Cessna 150 trainers. Shortly afterwards, Ernie Fox, a highly successful alumni with a love for Aviation and a staunch supporter of the concept of aviation education, donated the next two aircraft to the University. John Odegard's enthusiasm prevailed and several of the airlines serving North Dakota offered members of their executive staff as volunteers to supplement the teaching requirements.

The FAA, through the efforts of the Fargo GADO chief, helped organize and provide the basis for training standards in both the area of flight and air traffic control. The then GADO Chief, Les Severance, is now retired from the FAA and is working for the Department as a consultant, after acting as Assistant Director of Operations for many years. His role in the early structuring of the Department's curriculum and his extra efforts beyond the call of duty are reflections of his dedication to the Aviation program. For his contribution, Les was awarded the UND Presidential Medal in 1972 by President Starcher on the recommendation of the Dean of the College of Business and Public Administration. An important part of Les's effort included approval of course content (flight and ground school) by the FAA prior to approval of the Aviation program by the Board of Higher Education. The basis for final approval was that flight operations and training would be self-sufficient and need no state financial support during the formative years of the program. This was accomplished by charging the students for their flight and ground school courses over and above their tuition, a practice which was to stay in effect over the years and added to the burden of survival and subsequent growth of the Department.

1969

By the Fall semester of 1969, with 12 students and 2 faculty members, the Department of Aviation at the University of North Dakota was established with John Odegard as chairman.

1969 was only the first of a series of milestones for the Department.

The original staff, in addition to Odegard, included Elton "Lee" Barnum, an aviator, educator, and one of the most highly regarded flight instructors in the United States. Lee brought to the Department a rare combination of talent and ability. He was highly educated in areas other than Aviation and had active interests in the fields of theology, music, and education. During his career with the Department, which continued until his death in 1979, Lee was truly a dedicated member of the Department team. In 1973, he was honored by the Federal Aviation Administration which named him the Flight Instructor of the Year for the Rocky Mountain Region. He also served for many years as a coach of the UND Flying Team, which has gained recognition in national competition. The trophies that his teams won are still on display in the Department offices at Gamble Hall. Barnum was also recognized as an outstanding authority, both nationally and internationally, on the design and construction of dirigibles. In his spare time, he constructed many exact models of dirigibles and early era aircraft. These models are now part of a collection of his works displayed at the airport and the "Elton Lee Barnum" Memorial Library in Gamble Hall.

Nodean Jelsing was named supervisor for the flight operation. He had enrolled in the Aviation program following a tour in the Air Force and was employed as a work study student. Dean's dedication and initiative guided him through a series of promotions during the formative years of the program. He was responsible for the move to the "east" side of the airport and leased a trailer house which became the first flight operation facility. Later, Dean designed the "Candor Building," which was constructed by "Doc" Candor of Fargo and leased to the Department. Dean was instrumental in the development of the flight facilities and the growth of the airport operation. In 1975, he resigned his position as Director of Ground Support to pursue his own business interests.

The original staff funding of 2.5 full time teaching positions, approved in 1969, remained unchanged beyond the decade.

1969 also brought the donation of a Douglas DC-3 aircraft from Harry F. Bradley, founder and owner of Houston Aviation Products, as well as a GAT-1 flight simulator from the Robert Campbell Foundation. Bill Knox, a retired airline captain and successful farmer from Fisher, Minnesota, was hired on a part-time basis to fly the aircraft. The DC-3 was primarily used to transport the

University's athletic teams. The DC-3 was later removed from service as a result of a sensational series of acts of sabotage against the aircraft.

1970

In 1970, with the assistance of U.S. Senator Milton Young and the cooperation of the City of Grand Forks, a temporary control tower was acquired for Grand Forks International Airport. The plan included federal funding for the tower staff with the city purchasing a portable tower facility to be located at the airport. Acquisition of the tower was the key to offering an Air Traffic Control program (ATC), enabling students to obtain actual experience in directing traffic. The monumental hurdle at this time was obtaining approval from the FAA to allow a student controller in the tower under direct supervision of the tower chief. This approval was granted, establishing a precedent, which was to be unique to the Department of Aviation throughout its entire history.

The same year, John Odegard was elected president of the University Aviation Association (UAA), a national organization of members, colleges and universities dedicated to the elevation, recognition and standardization of academic course material and curriculum structure.

The new Department graduated its first five candidates with a Bachelor of Science in Business Administration with a major in Aviation Administration: Don Johnston, Dean May, William Sacrey, Dennis Thompson and John Van Middlesworth.

Enrollment soared to more than 300 students enrolled in Aviation classes.

The Department motto "Dedicated to the Education of the Aviation Professional" was chosen as the credo for its operation.

1971

The aircraft fleet grew to 11, with a Fall enrollment of 539 students, 189 taking flight training, and 151 Aviation majors.

The staff on campus was increased with the addition of David Pishko, a graduate student and flight instructor. Dave taught academic classes between flight instructor chores. Another graduate student, Kent Horne, taught the first class offered in Air Transportation.

The Flying Team won fourth place in the NIFA Airmeet held in San Jose, California. Earlier, the team placed first in Regional competition held in Grand Forks.

The Department graduated 10 Aviation Administration majors.

1972

Aviation majors totaled 147 with enrollment of 367. 11 majors graduated during the year.

The University Air Service was placed in jeopardy in 1972 when a series of engine failures on the DC-3 aircraft lead to a suspicion of foul play. An extensive investigation followed and it was determined that the aircraft had been sabotaged by introduction of a sugar substance into the engine lubrication system.

Several near disasters occurred, one while transporting President Starcher and other administrators, another while the basketball team was returning home from Iowa and again when the hockey team was attempting to depart Duluth, Minnesota for Fargo during a snow storm. The untimely engine failures could have been disastrous without the outstanding flying ability of Bill Knox, the plane's captain. Odegard, as co-pilot, praised Bill's outstanding performance during the emergencies and noted Knox's 16,000 hours of flight experience with heavy aircraft was a valuable asset in safely landing the airplane. Shortly thereafter, the use of the DC-3 was discontinued and the aircraft disposed of. Interestingly, that same DC-3 aircraft is still flying, ten years later.

In the same year, the Department leased the large city hangar at the Grand Forks International Airport from the city to store and maintain the growing fleet of training aircraft. A temporary shop area was set up in one corner of the building. The area was formed by hanging canvas tarps over a wood framework and utilized a gasoline powered heater to keep the mechanics warm during the cold winter months.

Donald I. Smith joined the teaching staff in the Fall semester as a lecturer and consulting engineer. He received a Bachelor of Mechanical Engineering degree in 1943 from the School of Science and Technology, Pratt Institute, New York, and did graduate studies at Columbia University. He later completed the Harvard Business School Course given at Adelphi College. Smith had over 30 years experience in the aviation industry before joining the Department, and had served in various management capacities, ranging from a member of the Executive Committee and Plant Manager at Lockheed Aircraft Service Company, to President and Chairman of the Board of Aerseco Incorporated, a New York designer and manufacturer of aircraft ground support equipment.

While at Lockheed, he conceived the design for the world's first suspended cantilever hangar which was constructed at Kennedy International Airport. He received worldwide recognition for this effort, including receipt of the Outstanding Building Design Award from the New York City Chamber of Commerce. Because of his many friends and associates in the industry, Don was instrumental in

organizing a program within the Department which brings key aviation industry executives to the campus each semester.

During the same year, Jerry Nelson joined the Department and became the first aircraft dispatcher at the airport. Jerry had retired from the Air Force as Master Sargeant. His experience played an important role in the safe development of the flight operation which was expanding dramatically.

The aircraft maintenance function at the airport was suffering a lack of adequate facilities. The student dispatch office, a small portable home, was bursting at the seams with students and instructors. To satisfy both needs, a new facility which Dean Jelsing designed was built and leased from Candor Construction. Wayne "Doc" Candor was a successful businessman from Fargo, North Dakota, who had an active interest in aviation and a desire to help further the goals of the Department of Aviation. The building, of pre-cast concrete design, was erected adjacent to the large hangar. It was completed the same year and provided the much needed space for aircraft maintenance and dispatch.

1973

The year 1973 saw a broadening of the area of involvement for the Department. The basic precepts of education: academic, service and research, were the guidelines prompting the Department's involvement with Weather Modification Research.

The Department submitted a proposal to the National Science Foundation and the Bureau of Reclamation for a grant to train pilots to perform Weather Modification Research (cloud seeding to enhance precipitation and suppress hail). Receipt of the initial funding of $285,000 marked the beginning of an effort which would lead to millions of dollars of research monies and equipment, resulting in the University becoming the largest Weather Modification Research research organization in the nation.

With the air service program in full swing and research underway, the Department had fulfilled its prime University mission.

Glen Wharan joined the airport staff as Shop Supervisor and Russell Seaver was employed as Flight Operations Supervisor at the airport location.

Enrollment reached 542 with 183 majors. 15 majors graduated during the year.

The aircraft fleet consisted of ten Cessna 150s, four Cessna 172s, and an Aerocommander for air service. The latter aircraft was obtained as surplus from the United States Army Surplus Properties' Defense Property Disposal Office (DPDO) in Texarkana, Texas.

The Department began offering a seaplane rating using a Lake Buccaneer owned by local businessman Robert Grina. With this aircraft, John Odegard and Bob Grina competed in the International Sea Plane Race held in September of 1973. The race took place in Canada, starting at Burlington, Ontario, to Kenora, Ontario, and back to Burlington with a prize of $10,000. They lost the race on a technicality but had the satisfaction of proving their skills and the performance of the aircraft by officially finishing in the top 6.

The UND Flying Team, a regularly sponsored activity of Alpha Eta Rho professional aviation fraternity, captured first place in the National Intercollegiate Flying Association (NIFA) Regional meet held in Kenosha, Wisconsin. Winning first place in this meet has been an annual occurrence for the Department over since.

John Odegard was appointed as a member of the State Aeronautics Commission by Governor Arthur Link. He also received the "William A. Wheatly Award" presented by United Airlines annually to an individual making outstanding contributions to the field of aerospace education. The Department instituted the program bringing visiting V.I.P.s from the aerospace industry to campus to address the Aviation student body. Guest speakers in 1973 were Charles Snell, vice president of Butler Aviation and Donald Nyrup, chairman of the board and president of Northwest Airlines.

1974

The year was marked with several significant happenings for the Department. The grant acquired to train weather modification pilots was supplemented by the U.S. Bureau of Reclamation to provide for the acquisition of a sophisticated, digitized C-band radar and the necessary ancillary equipment. The original intended use of the radar was to serve as a fixed base installation at the airport, to be used in conjunction with the pilot training program. However, the Department decided that tying up this expensive equipment when not in use during the summer vacations would be costly and a waste. The plan was to devise a mobile installation which could use the radar equipment during the summer on field sites, collecting weather modification data. The temporary Air Traffic Control Tower at Grand Forks International Airport was acquired from the city and was completely modified to carry the anticipated load of 28,000 pounds safely over the highway. A special low slung trailer was also designed to transport the 12 foot diameter radome over the road with sufficient bridge clearance. A special sling was created to remove and re-install the radome on the roof of the large hangar, 38 feet above the ground. The equipment designs were made and construction supervised by Don Smith.

Mel Schroeder joined the research staff to expand work on radar intercomparison.

The Mobile Radar Unit (MRU) was a complete success during its first year of operation and continues on field missions each summer. Use of the equipment in this fashion expanded the Department's involvement in weather modification research.

A meteorology lab was set up in a former classroom space at Gamble Hall, giving students access to hourly weather reports.

Dave Pishko left the Department for a position in aviation education at Cessna Aircraft, Wichita, Kansas. Dr. Kent Horne returned for a brief time to act as initial coordinator of the Department's Aerospace and Atmospheric Research program. Martin Spargo joined the airport operation as flight instructor and air service pilot.

During the Spring Semester, Dana Siewert began attending UND as a student and part-time flight instructor. By the Fall Semester, he was promoted to a Supervisory Flight Instructor.

George Hammond joined the teaching staff upon his graduation from UND with a BSBA in Aviation Administration, bringing to the Department a tremendous background of experience. Prior to joining UND, George had retired from the Air Force as a full Colonel after an illustrious career spanning over 34 years. During his tour of duty, he served as Director of Operations of Tactical Reconnaissance Fighter Wing, Vice Commander of a Tactical Fighter Wing with responsibility for 4300 personnel and 75 aircraft, Director of Operations and Plans for the 7th Air Force in Viet Nam and at the time of his retirement was Deputy Commander of the Grand Forks Air Force Base, North Dakota. In addition to his degree from UND, George attended many military schools to qualify him as a pilot, navigator, bombardier and airplane mechanic. In addition, he completed courses in gunnery and statistical control in the Squadron Officers School and Armed Forces Staff College. Before arriving at UND, George had accumulated 8500 flying hours.

Robert "Bob" Reis began his employment with the Department as a work study student on July 1, 1974, assigned as a clerk under the supervision of Dean Jelsing, director of Flight Operations at the airport. His duties included maintaining the aircraft parts inventory, maintenance records, fuel purchases, accounts payable and numerous other miscellaneous tasks.

An Aviation Internship program was started when 22 students from the Weather Modification Pilot Training Program were assigned to various private contractors performing operational weather modification during the summer months. This same program was later broadened to include internships with airlines and at airports around the country.

The first Aviation Department trip to Europe was organized and a two week course developed to explore various Aviation

organizations and facilities. Students visited Folker, Concord, The Swiss Air Transport Museum (Lucerne), the London Air Show, the Dirigible Museum, German Air Museum in Munich and Lufthansa. John Odegard arranged and conducted the tour.

In addition, a group of Aviation students traveled to New York via Rockford, Illinois and Dayton, Ohio, to visit various aviation facilities. The field trip included stops at the FAA Air Traffic Control Center monitoring the Chicago area, the Air Museum at Dayton, Ohio, and various airline and airframe manufacturers located on the East Coast. Don Smith organized the trip and arranged the visits. The group was hosted by the Port of New York and New Jersey Authority for a formal dinner and attended a special luncheon at the Port Washington Yacht Club, courtesy of R. Dixon Speas. It was at Port Washington, Long Island that Pan American originated its overseas flying boat operation. Much of the original hangar and facilities were still in place at that time.

Aviation students interested in becoming airport managers organized the Student Aviation Management Association (S.A.M.A.). With John Brennen elected as its first president. The group drafted its by-laws around those governing the American Association of Airport Executives (A.A.A.E.) with a goal of becoming the first junior body of this prestigious organization.

The Department's research activity and weather modification involvement became part of the national Project Skywater. U.S. Senator Milton Young visited the airport site and inspected the MRU and supporting equipment. The large city hangar was modified to make the radar equipment on the roof more accessible and to facilitate the maintenance of the wave guide installation.

The Department began offering Aviation ground school courses in the evening.

The fleet grew to 18 aircraft. Enrollment was 477 with 185 majors. 13 majors graduated during 1974.

V.I.P. guest speakers included R. Dixon Speas, president and founder of R. Dixon Speas Incorporated, the largest aviation consulting firm in the world, and Bjorn Tornbolm, executive vice president of Scandinavian Airline System, Stockholm, Sweden.

The UND Flying Team won first place in the Regional Airmeet, as well as the "Top Male Pilot Award" in the National Airmeet.

1975

Enrollment reached 597 with 214 majors. Flight activity generated 10,268 flight hours. 26 Aviation Administration majors and the first Airport Administration major, David Watters, graduated during the year.

Research activity was again expanded to include the following phases of weather modification.

1. Education of pilots to fly weather modification missions.
2. To serve as a data collection station for inputs into the national network.
3. Research into the downwind effects of cloud seeding as a part of Project Skywater.
4. Further upgrading of the Mobile Radar Unit including funding for an additional programmer and maintenance technician.

In the academic area the Department offered a second four-year degree program within the College of Business and Public Administration leading to a B.S.B.A. with a major in Airport Administration. The curriculum, the first of its kind in the nation, was designed to prepare managers for the ground side of Aviation. Based on the academic parameters established by the American Association of Airport Executives, the curriculum de-emphasized the flight portion of the original Aviation Administration curriculum and added courses in transportation, airport management and planning.

The offices in Gamble Hall were expanded to provide additional space for the growing research activities.

Professor Winston Dole, a retired Lieutenant Colonel, joined the the teaching staff. Barbara Solee, a graduate of the Aviation Administration program became the first Public Information Specialist for the Department, providing information about the University's weather modification activities.

The Department acquired a fully instrumented glider, a Blanik L-13, for training weather modification pilots in cloud recognition and the effect of thermals. The glider was originally leased from AND-MAR, Inc., a Minot, North Dakota corporation (State Senator Morris Anderson and Sam Maragos). These individuals later donated the glider to the Department.

George Hammond was named Director of Flight Operations after the resignation of Russell Seaver.

Bob Reis became a full-time employee during the year and was promoted to Accountant Technician.

A group of students participated in a second European tour which included stops at various airlines, airframe manufacturers and airport facilities at Brussells, London, Amsterdam, Frankfurt, Munich, Lucerne and Paris. George Hammond arranged and conducted the tour.

Flight operations inaugurated the Student of the Month Award and an Instructor of the Quarter Award. Both awards are made to individuals striving for safety and proficiency. The instructor award is based on effectiveness as a teacher. This policy of rewarding both students and flight instructors for outstanding performance has continued as a regular policy in the Department of Aviation. The Awards include free flight time as well as cash renumeration.

As part of the weather modification program, leading scientists, cloud physicists, meteorologists, climatologists, and economists were brought to campus to teach a special aviation meteorology course to students in the weather modification pilot training program. This practice has become an integral part of the class offering.

The Epoch Pilot Program was developed to bring talented high school students to campus between their junior and senior years to earn their private pilot certificate and regular college credits. This program continues to be unique in the nation.

New aircraft included a Model C Navajo (7 passenger twin) for air service use. V.I.P. guests for the year included Duane O. Wood, president of Lockheed, California, and Kenneth Smith, vice president of Frontier Airlines.

The UND Flying Team placed fifth at the NIFA National Airmeet held in Santa Fe, New Mexico. Karen Coyle was named the "Top Female Pilot."

1976

Two two-year curriculums were implemented during the year: Flight Attendant and Professional Pilot, both A.A. degrees conferred by University College. Professional Pilot gives the opportunity to receive an intensive professional aviation flight education over a two year period.

Fall enrollment reached 517 with 235 majors. Flight activity was 10,727 hours for the year. 44 Aviation Administration majors, three Airport Administration and the first two flight attendant majors graduated during the year.

The first Annual Aviation Scholarship Awards Banquet was held in the fall of 1976. Bryce and June Streibel made a $10,000 endowment to fund an annual $1,000 Aviation scholarship. This endowment gave impetus to the yearly scholarship funding efforts and is only one of Bryce's many outstanding personal contributions to the Department.

John Odegard was invited by his Royal Highness, Crown Prince Hassan Bin Talal of the Royal Kingdom of Jordan, to meet with Major R. Majali, director general of the Jordan National

Geographic Center in Amman, Jordan, to discuss weather modification and research. John met with the majority of the leaders of the kingdom and lectured to Prince Hassan, his cabinet and administrators (June 8-18). The conclusion of the visit resulted in a request by the Jordanian government that the University prepare a proposal for the initial feasibility of a Weather Modification Pilot Education Program for their country.

Dr. Patrick Brady was recruited from the University of Oklahoma to assume the position of Assistant Research Professor and begin the development of the experimental design and analysis efforts for Bureau of Reclamation (BUREC) contracts totaling $200,000. Pat received his B.S. degree in Mathematics in 1971, an M.S. degree in Information and Computer Science in 1973, and a Ph.D. degree in Engineering in 1976, all from the University of Oklahoma. Prior to joining the Department, he had participated in atmospheric research associated with the grants and contracts from various agencies including the National Science Foundation (NSF) and BUREC. He developed and/or implemented mathematical and statistical techniques for the analysis of geophysical data, including multivariate regression analysis, linear discriminant analysis and spatial-temporal correlation.

Mary Stoudt, a 1976 graduate of the University of North Dakota in Journalism and Public Relations, joined the staff as Public Information Specialist, replacing Barbara Solee who accepted a position with Northwest Airlines.

Michael Poellot joined the Weather Modification Research Group as a Research Meteorologist. He received his M.S. degree from Colorado State University in Atmospheric Science in 1975 and a B.S. in Physics from Valparaiso in 1972. With the Department he assisted in basic research of total-area effects of cloud seeding. In 1977 he was promoted to Assistant Research Professor. His duties included performing research in total-area effects of cloud seeding, development of computer algorithms used in analysis and methods of determining seeding effects, conducting research in mechanisms of total-area effects, coordinator and instructor for the UND Weather Modification Pilot Training Program, forecaster and Learjet scientist/co-pilot for the Extended Area Effects Exploratory Experiment, 1979, and scientist and co-pilot on the UND Cessna Citation II research aircraft, 1980-.

William S. Wickman, a graduate of the UND Aviation Program, was hired to supervise the Weather Modification Pilot Training Program for the 1976/77 school year.

V.I.P. guests for the year included Tony Levier, world famous test pilot, and Ted Thonstad, vice president of Personnel for Northwest Airlines.

1977

Fall enrollment totalled 640 with 266 Aviation majors. Flight activity reached 16,341 hours for the fiscal year. 34 Aviation Administration, three Airport Administration and three Flight Attendant majors graduated during the year.

The Department inaugurated its third four-year program, offering a Bachelor of Science degree in Aeronautical Studies through the College of Arts and Sciences. Requirements for the degree are the completion of 20 hours in an area of concentration within the College of Arts and Science in addition to the courses established by the College and the Department of Aviation. The program was designed as an alternative for the Aviation student who did not want a business core curriculum. A commercial and instrument rating constituted the minimum flight requirement.

Three new Frasca Simulators were added at the airport (two single-engine, one multiengine) to improve the quality of training and reduce cost due to high fuel prices.

The first helicopter course was approved and offered with Ernie Knudsen as the fight instructor. An Enstrom helicopter was leased as the first training machine.

The research activity was again expanded with the acquisition of an extensive computer system for the analysis of digital radar data collected in summer time field experiments. Additional space was acquired in Gamble Hall to house the equipment.

Frank Argenziano, chief of aircraft maintenance, was selected "Mechanic of the Year" for the State of North Dakota by the State Aeronautics Commission.

A 1976 Beechcraft A-36 Bonanza was leased for air service and student training direct from Beech Aircraft factory in Wichita. This inaugurated a factory direct lease relationship with UND.

The Department's Weather Modification and Research Program received a $570,681 amendment to its contract with the Bureau of Reclamation for the increased use of the radar unit, including control of research aircraft and for more detailed analysis of the digital radar data. The amendment pushed the total grants and contracts awarded to the Aviation Department to $1,804,891.

Alpha Eta Rho and the Department sponsored the FAA Golden Sentinel Safety Seminar on campus. Over 300 pilots attended the seminar to review safe flying procedures.

The Flying Team won first place in the Region and fourth place in the National Meet held at Oklahoma State University. Robert Allison, a UND Aviation major, won the highly prestigious "Top Male Pilot Award" for collegiate aviation.

The Epoch Pilot Program was offered for the third consecutive year.

Fourteen students served internships flying for weather modification research contractors. Four other students served internships at Kansas City and Minneapolis airports.

Susan Lloyd joined the staff as Public Information Specialist. She replaced Mary Stoudt, who became associate editor of North Dakota Horizons magazine.

Kent Streibel, a UND Aviation graduate, was named Weather Modification Pilot Training Coordinator.

V.I.P. guests for the year included Richard Seitz, director of Product Support for Grumman Aircraft Corporation, and Hoadly Dearn, director of Frontier Airlines.

1978

Enrollments in the various Aviation programs continued to grow at the rate of 40% per annum over the previous year. 715 students enrolled the Fall semester, with 324 majors. Flight training hours for the fiscal year reached 18,405 and 53 majors graduated in calendar 1978. These included 44 Aviation Administration, three Airport Administration, and four Flight Attendant majors as well as the first Professional Flight and Aeronautical Studies graduates, Dana Siewert and Wallace Craig Schmidt.

Leon Osborne joined the research staff as data processing coordinator. He holds an M.S. in Meteorology from the University of Oklahoma (1979) and a B.S. in Physics from Utah State University (1976). His duties included responsibility for coordinating the overall data processing effort for the Department's weather modification research. He was promoted to Assistant Research Professor in 1980 and was named manager of dynamics research, responsible for numerical modeling efforts associated with the Department's weather modification research.

Carl Grimm, from Peoria, Illinois, joined the faculty of the Department of Aviation. He held an M.A. in Communications and was scheduled to teach the various academic flight courses.

Bob Reis was promoted to Accountant with responsibility for all the Department's budgets, including academic, financial affairs, operational and research.

The Department again hosted the FAA Sentinel Team which presented a Safety Program to all Aviation students. During the same year, a CFI re-validation seminar was presented, also in conjunction with the FAA.

John Odegard received the "B.C. Gamble Award" for outstanding teaching and service to the University of North Dakota.

Six officials of the Regional Airports Branch, Transport Canada, visited the Department and addressed the student body. Conducting the afternoon lecture and discussions were Mr. D.W. Bell, regional manager, Airports and Properties; Mr. R.F. Heilinger, regional controller, Civil Aviation Branch; Mr. H.J. Bell, project manager, Winnipeg Airport Systems Study; Mr. T.J. Gibson, regional superintendent, Airport Planning and Program Administration; and Mr. Lawrence Reilly, airport general manager, Winnipeg International Airport.

As part of a total University project, the Department developed a ten-year plan setting forth the criteria and goals for the continued growth of aviation education in the areas of academic research and service. The Aviation Department has followed the plan with only minor variations in schedule and achievement. Each year the ten-year plan is reviewed and updated as required.

Regular projects for the year included the "Great Paper Airplane Contest" and the Epoch Pilot Program.

The UND Flying Team again won first place in the Regional NIFA Meet and second place in the National Meet held at Murfreesboro, Tennessee.

The Aviation scholarship fund for the first time exceeded $10,000.

The Department of Aviation received a $3.3 million contract from the Bureau of Reclamation for continued and expanded weather modification research. This included UND's new involvement in processing and analysis of digital radar in association with the Sierra Cooperative Pilot Project.

In the fall, another milestone was reached with the establishment of the Aviation Alumni Chapter. Thirty-seven graduates signed the charter on the 20th day of October. Excerpts from the resolution state that the chapter was established "whereas, a special camaraderie exists among University of North Dakota alumni, who have majored in Aviation, and whereas, there is a desire among Aviation Alumni to maintain communications among each each other and the faculty of the University of North Dakota Aviation Department, and whereas, it is the desire of the Aviation Alumni to promote, strengthen and encourage the continuing development of the Aviation program at the University of North Dakota."

V.I.P. guests for the year included Maxy Anderson, world famous balloonist, and Russ Meyer, Jr., chairman of the Board for Cessna Aircraft Corporation.

1979

The Department experienced tremendous growing pains during the year as a result of a record enrollment that far exceeded the normal growth pattern. Principle cause for the unusually high percentage of new students was attributed to an article which appeared in the Minneapolis Tribune. The article was extremely complimentary of the program and the caliber of its graduates. Enrollment leaped to 1136 with 541 majors. Flight activity jumped to 23,353 hours. 41 majors graduated during the year.

As a result of the influx of students, the staff and facilities were taxed far beyond normal capacity. The size of the aircraft fleet was increased to a total of 56 aircraft. Storage and maintenance requirements during the winter months was a challenge. Many aircraft had to be stored outside in forty degree below zero temperature, making it difficult to operate safely and efficiently.

The decision to avoid turning away students was a wise one in light of shrinking enrollments at other universities. The immediate goal of the Department was to re-organize to handle the student load and expand the airport facility to support the numbers enrolled. A ceiling of 750 majors was established and the effort was directed to gear up to meet the student requirements at this level of enrollment.

The Department continued to suffer from a lack of funded teaching personnel. A large portion of the academic classroom work was being funded by proceeds from the airport flight operation.

Dana Siewert was promoted to the position of Chief Flight Instructor.

John Miller joined the staff as a research computer programmer after receiving his B.S. in Computer Science from UND. John was later promoted to Data Processing Coordinator, with responsibility for the maintenance of all systems software.

Andrea Winkjer was hired as Public Information Specialist, replacing Susan Lloyd, who moved to Bismarck with her husband.

Dr. James Heimbach joined the Department as an Associate Research Professor under the Atmospheric Research contract.

Approval was received from the FAA to offer an Air Transport Pilot Training course for airplanes, single-engine land.

Several safety seminars were held throughout the year in cooperation with the FAA.

The first edition of the Aviation Alumni Newsletter was published. At the same time, the names of graduates, together with their

current job status and whereabouts, was entered into the Department computer.

Les Severance was designated an FAA Airman Written Examiner by the Fargo GADO Office of the FAA, for private, commercial, instrument, and flight instructing.

The Flying Team won first place in the region and went on to Monroe, Louisianna, to win third place in the national competition. The team was coached by Les Severance.

A continuing problem of transportation for students traveling between the campus and the airport was solved with the establishment of a shuttle bus service. Operating on a regular schedule, the bus arrives and leaves the various locations at a time coinciding with both the classroom and flight schedules.

The scope of the Department's involvement with weather modification research was again greatly expanded with the acquisition of a Piper Cheyenne II aircraft. The aircraft was retrofitted with special sensing equipment and enhanced cloud seeding capabilities. Operation of the Cheyenne added a new dimension to the Department's research activity.

Twenty students participated in summer internships, serving in various flying and airport positions.

The Department's first retreat was held at Rutger's Birchmont Lodge in Bemidji, Minnesota. The meeting was extremely productive and provided time to review the Department's problems, goals and performance in keeping with the ten-year plan. The retreat has since become an annual staff event.

Late in the year, Dr. Cedric "Tony" Grainger joined the Department from Environmental Research and Technology Incorporated, and assumed the duties of Associate Professor and Director of Weather Modification Research. He earned both his B.S. degree in Physics (1966) and Masters degree in Meteorology (1968) from Montana State, as well as a Ph.D. degree in Atmospheric Sciences (1973) from the State University of New York.

Tony's experience also included acting as principal investigator and site director for Kansas HIPLEX, sponsored by the Department of the Interior. His first mission at UND was to retrofit the Department's two research aircraft, the Turbo-prop Cheyenne, acquired in 1979, and Citation II jet, acquired in 1980, to perform the various data collection missions. The Citation II became the nation's most sophisticated high altitude research platform. Equipment additions include a nose boom for measurement of wind flow, instrument console to accommodate the on-board Perkin-Elmer 7/32 C computer, reinforced radome and defoggers capable of withstanding hail encounters, a special observer's jump seat immediately behind and between the pilot and co-pilot seats,

special mounts for upward- and downward-looking radiometers, specially fabricated wing tip pylons for mounting a variety of probes, side-facing camera mounts within the cabin for time-lapse 16mm cameras, and optically flat glass windows to accommodate photography. Position measurements are based on the LTN-76 Inertial Navigation System (INS) by Lytton Industries. Cloud particle measurements are made by three Particle Measuring Systems (PMS) probes.

In July, the Department was saddened by the sudden death of Professor Lee Barnum.

Professor Don Smith commenced a series of visits with American Airline Officials at Fort Worth, Texas to develop a flight engineering curriculum, to be offered jointly by the University of North Dakota and the airline.

The Mobile Radar Unit underwent significant revamping. The rawinsonde equipment was relocated to a new trailer acquired by the Department. Many structural changes were also incorporated in the unit to accommodate the present complement of equipment.

Ray Cross joined the staff to begin the task of providing a data base management system for the Department. In the the later part of the year, the managerial staff was introduced to one of the first management reports from the system, giving a daily graphic report of flight activity.

More stringent regulations concerning transfer credits for flight requirements, together with the fees for written and oral flight examinations, were announced by John Odegard. This was part of the Department's continuing effort to raise the quality of performance and the basis for evaluation of transfer credits.

The Dispatch crew at the airport, under the supervision of Les Severance and George Hammond, along with Bob Reis, assisted in the development of a new computerized flight scheduling system by Ray Cross, departmental programmer. The new system was designed to improve the efficiency and effectiveness of the flight training aspects of the program and was placed in service for the Fall Semester, 1980.

Kim Reiersgaard, a graduate of the Aviation Program, joined the Weather Modification staff as Coordinator of the Weather Modification Pilot Training Program.

The Piper Cheyenne, with the new data acquisition system (DAS), was operated for the Utah Division of Water Resources and Utah State University conducting Weather Modification Research.

During the year, John Odegard received FAA Multiengine Pilot Examining Authority along with renewal of commercial, instrument, glider and seaplane FAA Examining Pilot Certification Authority.

It was also announced that a new ground school course would be offered starting in the Fall Semester, Aviation 408, Professional Pilot III. The course covers the requirements for taking the written Flight Engineer Examination.

Roger Tilbury, form Nelsbruit, South Africa, joined the Department as Weather Modification Pilot for the new Citation II cloud physics aircraft.

Thirteen students participated in the summer internships for Weather Modification Pilots. Six other students participated in various groundside internships at airports in Kansas City, Minneapolis, and Tulsa, Oklahoma.

The Department added four new faculty members beginning with Fall Semester. Professors Dr. Don Uhlenberg and Ronald Tronier were hired to fill the vacancies created by the resignations of Winston Dole and Carl Grimm. Professor Richard Molenaar and Dr. Jeffrey Stith were to fill newly created teaching and research positions.

Don Uhlenberg received his Ph.D. in Education from Ohio State University and came to UND from Westminster College, Salt Lake City, where he was an Associate Professor in Aerospace Studies.

Ron Tronier was previously an Associate Professor at North Dakota State University and former commuter airline Captain. He is a retired Air Force Lt. Colonel with a Masters Degree from the University of North Dakota.

Rick Molenaar is a native of Grand Forks who graduated from UND in 1973 with a Bachelor of Science in Business Administration with a major in Personnel Management. He also received his M.A. in Personnel Management and Human Relations from Webster College in St. Louis and spent six years in the Air Force as an instructor pilot before returning to Grand Forks.

Dr. Jeff Stith is a Research Associate in cloud physics, primarily concerned with the Weather Modification Program's extended area of effects study. He received his Ph.D. from the University of Washington.

The Department's roster included 60 flight instructors, commencing with the Fall Semester. The aircraft fleet numbered 56.

Dana Siewert was honored by the FAA Rocky Mountain Region with presentation of their "Flight Instructor of the Year" award.

The seventh annual meeting of the North American Interstate Weather Modification Council was held. The meeting was co-hosted by the UND Department of Aviation and the North Dakota Weather Modification Board.

29 Aviation students received scholarships totaling $16,000 at the annual scholarship awards banquet. Karen Coyle, UND Aviation alumni and manager of the National "Takeoff" program for GAMA, was guest speaker.

The first annual Aviation Department Women's Banquet was also held in 1979.

The instant invoice for aircraft billing was instituted at the airport with the installation of the computer station at the aircraft dispatch area. The computer programs were placed in service to facilitate the scheduling of aircraft, instructors, and students.

John Odegard visited the Soviet Union for a two week period. The exchange was part of a US/USSR joint cooperation in the transportation program. The delegation visited aviation training installations in Leningrad, Kiev, and Moscow.

1980

Enrollment in Aviation classes was 1249. The Department included approximately 650 majors, and generated 39,845 flight training hours for the year. Full and part-time employees numbered 191. The fleet, including research aircraft, had grown to 62. The Department graduated 55 majors during the year, including the first Air Traffic Control major, Mark Motto.

During the year, a storage hangar was built at the airport in cooperation with the University Fellows. The new building of pre-stress concrete design provided approximately 10,800 square feet of much needed aircraft storage space.

In addition to the new building, the large city hangar was renovated. Improvements included a new insulated roof, new powered hangar doors, radiant heat, and new lighting. For the first time, the Department was able to store all of its aircraft fleet under roof. The new buildings were part of the Department of Aviation's Master Plan to expand the airport facilities to meet the operating needs of the students and research staff. A provision was made at the same time in the footings and structure to add a new hangar and shop facility between the Candor Building and new storage hangar sometime during the following year.

The Department announced a new class, "Aircraft Systems," taught by Frank Argenziano.

Dr. Louis Hembree joined the Research staff as a Research Associate, working with the analysis of HIPLEX Radar Data. He holds a Ph.D. in Meteorology from the University of Oklahoma (1980) and an M.S. in Environmental Health Engineering/Meteorology from the University of Texas (1971).

In May of 1981, the University of North Dakota hosted the National Intercollegiate Flying Association Airmeet (NIFA) in Grand Forks. Student committees handled the great majority of the planning efforts and were credited with the great success of the event. The Meet attracted hundreds of participants and entrants from throughout the country.

The Board of Education approved the four-year Meteorological Studies curriculum in August. The program grants a B.S. through the College of Arts and Sciences and is a joint effort of the Departments of Aviation and Geography. Dr. Patrick Brady was named coordinator of the program.

Gunter Voltz joined the Department as a part-time glider instructor. Gunter started flying in Germany in 1930; later he attended the German Airline Pilot school and was drafted into the Luftwaffe in 1937 where he flew various German aircraft until the end of the war. In 1951 he came to the United States and began training glider pilots. Gunter has over 3,000 glider hours and 8,000 hours in powered aircraft. In addition to his service with the Department of Aviation, he has been an interpreter for the U.S. National Glider Team participating in various countries around the world. At present, he is chairman of the Youth Education Committee of the Soaring Society of America, where he served in various capacities over many years.

Kim Althoff was hired to develop the software to be used with the onboard PE 7/32C computer in the Citation II research jet.

Fred Smith, chairman of the Board of Federal Express, was the V.I.P. guest at the Annual Scholarship Awards Banquet.

1981

The Department was shocked and saddened by the death of Dwight Eric Widseth in a mid-air collision. The casualty was the first in over 300,000 hours of safe flying accumulated by the Department since its establishment. Students and members of the staff went to Minneapolis to attend the funeral and visit with members of the family. John Odegard wrote the eulogy.

Dr. Tony Grainger, Mike Poellot, Roger Tilbury, Steve Skinner and Kim Althoff flew the Citation to Big Springs, Texas for several missions around convective clouds. The purpose of the exercise was to obtain actual convective cloud data as a final checkout of the Citation prior to the CCOPE field season.

The weather modification research activities that year were centered around project CCOPE (Cooperative Convective Precipitation Experiment), which was a joint effort of the National Center for Atmospheric Research and Water and Power Resources Service (BUREC), U.S. Department of Interior.

The field experiment was conducted from May through early August, 1981, with operations based at Miles City, Montana. CCOPE's purpose was to study the life cycles of summer convective clouds and storms to determine what processes are most important and to observe, understand, and learn how these processes interact to produce storms. No cloud seeding was being performed as part of CCOPE in 1981.

Student enrollment reached approximately 750 majors with a total Department budget of $5.8 million.

Fiscal Year 1981 saw flight training activity skyrocket to 44,780 hours. 98 Aviation majors graduated during 1981.

Twenty-two students were enrolled in the Weather Modification Pilot Training Program. They received a total of 86 hours of procedural training in a twin-engine Comanche aircraft.

The Department's annual budget reached $5.3 million with only $119,000 allocated from state funds. The bulk of the monies were received from student flight fees and atmospheric research contracts. The Department of Aviation received less than 2% of its total operating funds from the State, making it more than self-supporting, considering the overhead funds received by the University from the Department's contracts.

Construction was again underway at the airport. In keeping with the Department's Master Plan and the University's ten-year plan, a new hangar and shop facility was added between the Candor Building and the concrete storage hangar. These new additions added 7200 square feet of hangar space and over 7000 square feet of shop and future office area. Of pre-cast concrete design, the total facility represents the latest in heating (heat sink) and lighting for the various work areas. The final phase of this current expansion includes modification of the former aircraft and maintenance area in the Candor Building and converting it to a two-story configuration. The first floor will accommodate an expanded dispatch function and student lounge. The second floor will be utilized for offices and briefing areas for the flight instructor staff.

The Department, as part of its plan to diversify the scope and nature of the research activities, began developing ties with the FAA Technical Center in Pomona, New Jersey, as well as FAA headquarters in Washington, DC. The goal of this effort was to acquire new avenues for research.

Late in the year, a strike by the FAA Air Traffic Controllers placed a tremendous burden on the aviation industry and the Federal government. As a result of the illegal strike, thousands of controllers were terminated, creating an immediate need for qualified personnel. Since all UND flight students are required to take "Introduction to Air Traffic Control" as part of their

curriculum, and its unique position of hand's-on tower training, attention was focused on UND as a possible source for satisfying the government's personnel needs.

Through the efforts of State Senator Bryce Streibel and Chairman John Odegard, a proposal was prepared and presented to the proper authorities in Washington to provide an extensive facility on the UND campus in Grand Forks to train and expand the Aviation program to provide more qualified students for the needed Air Traffic Control positions. This was a logical next step since the Department had had an ATC option in both the two-year and four-year flight curriculums since 1971.

Based on the Streibel-Odegard proposal, U.S. Senator Mark Andrews, a member of the Senate Appropriations Committee and Chairman of the Appropriations Subcommittee for Transportation, was instrumental in including the funds for the new building in the Federal budget for the FAA. The proposed facility, to be called the "Center for Aerospace Sciences," will house all of the Aviation academic and research activities, including an expanded Air Traffic Control program.

Visiting V.I.P. guests for the year included William Wayne, executive vice president of Frontier Airlines and Tom Koors, vice president of Northwest Airlines.

1982

Early in the Spring Semester, plans were underway for the new Center for Aerospace Sciences building. Dr. Patrick Brady chaired the Building Committee, made up of members of the Aviation staff and University officials. Foss Associates of Fargo, North Dakota, was chosen to develop the architectural plans. The site selected for the new facility is located on the southeast corner of the intersection of University Drive and 42nd Street. The location is ideal, since it affords the first exposure of the campus when arriving from the westerly direction. The building will be contemporary in design, yet conform to the type of construction used elsewhere on campus. The new facility will provide approximately 51,000 square feet of useable space. The facility is scheduled for completion in the fall of the University's centennial year, 1983.

The Department reactivated its helicopter program, with the acquisition of a Robinson R-22 two place machine. Norris Pfeifer was employed a flight instructor for the program.

The Army ROTC program, under the guidance of Colonel W. Gale, initiated the requirement for helicopter training as part of their scholarship program. Based on the Army's needs and increasing civilian interest in helicopters, the Department plans to expand the number of machines in the immediate future.

Kim Woodmansee assumed the position of Public Information Specialist, commencing with the Spring Semester. Kim began working for the Department in 1979 as an Aircraft Dispatcher. She holds a B.S. degree in Education with a minor in Psychology from the University of North Dakota. She is currently working on a B.S.B.A. in Aviation Administration and has earned ratings of FAA Commercial Pilot, single-engine land--instrument airplane.

Significant aircraft acquisitions for the year included a new Cessna 206 on wipline amphibian floats and a Cessna Citation I jet. The floatplane represents the latest in available aircraft to enable pilots to obtain their seaplane ratings. The aircraft is equipped with an area-nav and a flight director system.

The Citation I is owned by Northern Improvement of Fargo and Tom Ryan of Grand Forks, and made available to the University for use as an Air Service aircraft. It affords qualified students an opportunity to obtain their Citation-type rating as well as to gain valuable flight experience as co-pilots on the aircraft air taxi flights under a Business Aviation Internship.

The first phase in a plan to tie in all clerical functions to a computer network were taken. All employee records and activities are handled by computer. Eventually all faculty and staff will have access to the network through computer terminals.

The Student Aviation Management Association (S.A.M.A.) planned the first all day seminar which brought key executives from various facets of the aerospace industry to campus to address the student body on the job opportunities available to them in the current marketplace. This seminar was held at the Chester Fritz Auditorium. Brent McNamara, president of S.A.M.A., conceived the program entitled "Aviation: Today's Ideas--Tomorrow's Realities."

William Shea, deputy administrator for airports, FAA, Washington, DC, was the guest speaker at the evening banquet held on April 30, 1982. Key speakers at the seminar included Russell W. Watson, manager, Air Age Education, Cessna Aircraft Company; Mr. E.J. Godec, vice president of Flight Operations, Air Wisconsin, Inc.; Mr. Lawrence McCabe, assistant airport director, Minneapolis-St. Paul International Airport; Mr. Earl Voelz, executive vice president, Associated Aviation Underwriters; Mr. Reginald Jenkins, vice president, Air Cargo, Northwest Airlines; Calvin Pitts, public relations specialist and test pilot, N.A.S.A; and Ruppert E. Thompson, check pilot for Republic Airlines.

The UND Flying Team received the prestigious Safety Award at the NIFA National Airmeet held in Bakersfield, California.

Visiting V.I.P. guests for the year included Thomas Gillespie, senior vice president, Piper Aircraft Corporation; William Shea, deputy administrator, FAA; and Joe Lapensky, chairman and chief executive officer, Northwest Airlines.

John Odegard was named chairman of the FAA's Airway Science Curriculum Task Force. The Task Force met in Washington, DC in July and finalized an Airway Science Curriculum designed by Dr. Don Uhlenberg. The generic curriculum has five areas of concentration: Airway Science Management, Airway Computer Sciences, Aircraft Systems Management, Airway Electronic Systems, and Aviation Maintenance Management. The new Curriculum, approved by FAA Administrator J. Lynn Helms, is designed to educate future FAA management level personnel, who can be hired directly into the FAA system. All interested colleges and universities may develop programs tailored to the the Airway Science Curriculum guidelines and submit for FAA approval. Graduates of approved programs will be eligible for listing on a special Federal Register, from which the FAA plans to hire 500 candidates per year.

In August, UND's aviation, atmospheric research and computer science programs were reorganized into the Center for Aerospace Sciences. John Odegard was named Director and will report to Dr. Alice Clark, vice president for Academic Affairs. The new Center contains the Department of Aviation, with Professor Don Smith as chairman; Division of Research, Dr. Tony Grainger, director; Division of Flight Operations, George Hammond, director; Division of Computer Services, Dr. Patrick Brady, director; Division of Fiscal Affairs, Robert Reis, director; Meteorological Studies Program, Dr. Patrick Brady, coordinator; and Department of Computer Science, Dr. Mok Tokko, chairman.

The Center for Aerospace Sciences now moves into UND's Centennial Year and in the tradition of the University's first 100 years has established the goal of becoming a national "Island of Excellence" in aerospace sciences, including aviation, atmospheric sciences, weather modification research, computer science and flight education.

GENERAL INFORMATION

The following is a list of student groups and activities functioning within the Department of Aviation:

Student Aviation Advisory Committee (SAAC)
Alpha Eta Rho
Student Aviation Management Association (S.A.M.A.)
Alpha Eta Rho--Professional Aviation Fraternity
Aviation Alumni Chapter

Publications:

"Takeoff," a Center newsletter published every three weeks.
"Aviation Alumni Newsletter"--Quarterly
"Alumni Directory"--Bi-annually
"Aviation Graduate Resume Booklet"--Annual

Committees functioning within the Center:

Curriculum
Budget
Academic
Promotion
Research

Annual Events:

SAMA Aviation Seminar in conjunction with Parents Weekend (Spring Semester)
Awards Banquet (Fall Semester)
Flying Team, Regional and National Competition--Alpha Eta Rho
Safety Seminars--Monthly
Retreat for key members of the Center--Annually
Resume Sessions (Spring, Summer and Fall Semesters)
CFI Workshops--Annually
Department Placement Service--
Internship Program:

1. Department furnishes pilots for operational weather modification to private contractors for employment in the summer.
2. Airport Administration students have internships at Kansas City International Airport, Minneapolis International, Winnipeg International, and other airports.

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